

DEC - 5 2003

**E. 510(k) Summary of Safety and Effectiveness**

Submitter: Hygia Health Services, Inc.  
434 Industrial Lane  
Birmingham, Alabama 35211  
Date: June 21, 2003

1. Contact Person Ms. Tracy Comas  
Chief Operating Officer  
Tel: 205-314-3920  
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2. Name of Device

Classification Name: Cuff, Blood Pressure CFR 870.1120  
Common or Usual Name: Blood Pressure Cuff  
Review Panel: Cardiovascular  
Classification: Class II  
Product Code: DXQ  
Proprietary Name: Hygia Health Services Reprocessed Blood Pressure Cuff.

3. Predicate Devices

Device	Manufacturer	510(k)
Critikon Soft Blood Pressure Cuff	Johnson and Johnson	K974080
Disposa-Cuff® blood pressure cuff	Crest Medical Equipment	K790810
Surgi-Cuff®	Ethox Corporation	K883977
CUFF-ABLE® Cuff	Vital Signs, Inc. (Bio-Medical Dynamics)	K911213
Statcorp Disposable Blood Pressure Cuff	Statcorp, Incorporated	K940214
Technicuff®	TECHNICUFF CORP.	K942259
Cloud Cuff®	Parts Port, Ltd	K002360

4. Device Description

Per CFR 870.1120, a Blood Pressure Cuff is a device that has an inflatable bladder within, or integral to, an inelastic sleeve (cuff) with a mechanism for inflating and deflating the bladder. The cuff is used in conjunction with an appropriate measuring device to determine a subject's blood pressure.

The Hygia Health Services Reprocessed Blood Pressure Cuff comprises tubing attached to a soft inelastic sleeve with an integrated inflatable bladder that is wrapped around the patient's limb and secured by hook and loop closure. The device tubing is connected to an appropriate non-invasive blood pressure measurement system. The blood pressure cuffs contain no latex. Sizes include neonatal through large adult. Each cuff is packed in a sealed polyethylene (non-sterile) bag and each cuff is marked with the effective size range of limbs on which it may be used.

#### 5. Intended Use

The Hygia Health Services Reprocessed Blood Pressure Cuff is intended to be used in conjunction with non-invasive blood pressure monitoring systems by personnel properly trained in the use of manual or automatic sphygmomanometers as appropriate. The device is non-sterile and is intended as a single patient use device. It is available in neonatal through large adult size.

#### 6. Technological Characteristics

The technological characteristics of the Hygia Health Services Reprocessed Blood Pressure Cuff are identical to the originally manufactured Blood Pressure Cuff in design, materials, energy source, mode of operation, and performance characteristics. Some of the original devices are indicated for multiple patient usage whereas the Hygia Health Services reprocessed devices are indicated for single patient use only. The only differences between the original devices and the reprocessed devices are with respect to changes that result from the cleaning, disinfection, repackaging and relabeling processes used by Hygia Health Services to prepare the used original devices for safe and effective use on other patients as a single usage device.

#### 7. Performance Data

Non-clinical Tests- Comparative bench testing was utilized to assess and prove similarity of function between the Hygia Health Services Reprocessed Blood Pressure Cuff and the predicate devices. Tests showed that the functional and operational performance characteristics including compression, pressure control, leakage, and both safety and operational parameters used when connected to inflation and measurement equipment were substantially equivalent.

Test Conclusions- Non-clinical test results of the Hygia Health Services Reprocessed Blood Pressure Cuff indicated substantial equivalence in the measured characteristics to the predicate devices, the as originally manufactured blood pressure cuffs.

#### 8. Statement of Substantial Equivalence

The Hygia Health Services Reprocessed Blood Pressure Cuff is substantially equivalent in technology, function, operating parameters, and intended use to Blood Pressure Cuffs that are currently commercially available and in distribution. The original devices may be marked for "single-patient use only" or for "multiple uses". After reprocessing, they are marked for "single patient use" only. Hygia Health Services does not change the device in any way except to return the device to a "usable" condition by processing it through a scientifically validated disinfection procedure. The Hygia Health Services high level disinfection (HLD) protocol does not alter the efficacy, safety, composition, or intended use of the device. The basis of operation for the devices is the inflation of a bladder, which is placed around the patient's limb. The cuff is connected to a compatible inflation device. Inflation of the device may be accomplished either manually or automatically according to the type of instrument used.

9. Hygia Reprocessed BP CuffsManufacturer

Allegiance Healthcare  
Welch Allyn  
Johnson & Johnson  
Kimberly-Clark Corporation  
Spacelab Medical  
Kimberly Clark Corporation  
Vital Signs  
Technicuff  
Medline

Product

Tactics Soft Blood Pressure Cuff  
Soft Blood Pressure Cuff  
Critikon Soft Cuff  
Soft and Vinyl Personal Cuff  
Tru-cuff vinyl and soft  
Novaplus soft disposables  
Cuffable  
BP Cuff  
BP Cuff Soft and Vinyl

Note: Welch Allyn manufacturers and private labels BP cuffs for Allegiance.



Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

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Hygia Health Services  
c/o Mr. Tracy Wood Comas  
Chief Operating Officer  
434 Industrial Lane  
Birmingham, Alabama 35211

Re: K032821  
Trade Name: Reprocessed Blood Pressure Cuffs  
Regulation Number: 21 CFR 870.1120  
Regulation Name: Blood Pressure Cuff  
Regulatory Class: Class II (two)  
Product Code: NPP  
Dated: November 24, 2003  
Received: November 25, 2003

Dear Mr. Comas:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050. This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (301) 594-4646. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,



for Bram D. Zuckerman, M.D.

Director

Division of Cardiovascular Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

Concurrence of CDRH, Office of Device Evaluation (ODE)